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Research Report RR812

Research Report
No 812

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ISBN 978 1 84478 844 6

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Executive summary

The Aimhigher: Excellence Challenge intervention seeks to encourage more young people to participate in tertiary education. This paper updates previous estimates of the impact of the programme on the GCSE marks and reported expected school leaving ages, among year 11 pupils. Information from 3 different cohorts is used (whereas the previous analysis had data on the first 2 cohorts). In some schools the second and third cohorts have been exposed to the policy, whereas in others only the third cohort was exposed to the policy. This distinction is used to model the impact of the policy using linear regression analysis. However the lack of a comparison group in Spring 2004 means that the impact of the policy can only be estimated under relatively strong assumptions about the evolution of the impact of the policy across time.

Under the assumption that the policy had the same impact in the original treatment (EiC Phase 1 & 2 areas) in Spring 2004 as in Spring 2003, we find evidence that being part of the Aimhigher: Excellence Challenge programme in the new areas (EiC Phase 3) has led to a 5.2 percentage point increase in the year 11 pupils expecting to leave education at age 20 or over. Although slightly larger, this estimate is not statistically significantly different from the increase of 3.7 percentage points found in the original (EiC Phase 1 & 2) areas. Across both types of area (EiC Phase 1 & 2 and EiC Phase 3) we estimate that the average impact of the policy is to increase the percentage of year 11 pupils reporting that they will leave education at age 20 or above by 4.6 percentage points. We also find some evidence of a similar positive impact on GCSE English results, although the impact across other GCSEs is less clear.

While the assumptions made in producing these new estimates are relatively strong it is clear that the analysis of the new data does not contradict the previous estimates (which were reliant on less strong assumptions).

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1. Introduction

The Aimhigher: Excellence Challenge programme of interventions seeks to encourage young people to participate in tertiary education by providing them with additional support and information. The objective of the policy is, in particular, to increase Higher Education participation among young people from groups that have traditionally had low Higher Education participation rates.

Aimhigher: Excellence Challenge is closely linked to Excellence in Cities (EiC) and has been introduced in the Phase 1 and 2 EiC areas and the Education Action Zone (EAZ) areas from September 2001, and subsequently extended to the EiC Phase 3 areas. The Aimhigher: Excellence Challenge programme seeks to encourage participation in Higher Education, but the Excellence in Cities areas also benefit from special support for young people deemed to be gifted and/or talented.

Previous analysis has looked at the quantitative effects of the first full year of Aimhigher: Excellence Challenge.[2] This compared the outcomes measures in Spring 2002 and Spring 2003 in the EiC Phase 1 and 2 areas (where the policy had only had time to affect outcomes in the latter year) with outcomes in the EiC Phase 3 areas (where the policy had not yet had time to have had any impact). The analysis in this short paper incorporates outcomes measured among year 11 pupils in Spring 2004 where the policy could have had an impact on outcomes in both the EiC Phase 1 and 2 areas and also in the EiC Phase 3 areas.

The Aimhigher: Excellence Challenge policy is intended to be implemented on pupils in years 8 to 13. If effective it will lead to higher proportion of pupils exposed to it benefiting from Higher Education. With data available after three years of the policy being in place we are not able to estimate the effect on individuals

[2] See Emmerson, *et al* (2005) and Morris and Golden (2005).

exposed for the whole four years of the programme. In addition we are also not able to view the actual Higher Education choices made by those who were exposed to the policy. Instead, we are able to look at the effect that Aimhigher: Excellence Challenge has so far had on those exposed to it, in terms of their stated intention about when they will leave full time education and on their education ability, as measured by their performance at GCSE examinations.

We estimate the impacts using a linear regression technique under the assumption that the impact of Aimhigher: Excellence Challenge in the EiC Phase 1 & 2 areas was the same in Spring 2004 as it was in Spring 2003. The structure of this short paper is as follows. Section 2 describes the data and methodology used to investigate the impact of the policy on potential early outcomes of interest. Section 3 presents the results of our analyses. Section 4 concludes.

2. Data and methodology

The quantitative evaluation of Aimhigher: Excellence Challenge is being undertaken using pupil level data collected in the Aimhigher: Excellence Challenge areas. The data consist of merged data from pupil-level questionnaires and the National Pupil Database (NPD) which contains the Pupil Level Annual School Census (PLASC) and attainment data. The questionnaire data focus on attitudes to education, future expectations, and also includes some background characteristics about young people's families. The NPD contains administrative records of pupil-level attainment at Key Stage 2 (usually taken at age 11), Key Stage 3 (usually taken at age 14) and school-level data as well some basic background characteristics such as gender and the schools attended. This pupil-level background data is supplemented with data from The Pupil Level Annual School Census (PLASC) which was first collected in 2002. It contains pupil-level information such as ethnicity, mother tongue, postcode, entitlement to free school meals and status with regard to special educational needs. The information on the pupils in the Aimhigher: Excellence Challenge is crucial to the analysis, as it allows us to control for the fact that different areas will contain pupils with different backgrounds and prior experiences of education. In particular a key strength of the data is that we are able to take into account the pupils prior attainment at both Key Stage 2 and Key Stage 3 examinations. Further details of the data can be found in Tables 1 to 3 of Appendix 2 of Morris and Rutt (2006).

The areas covered by EiC Phases 1, 2 and 3 have, on average, higher levels of measured deprivation than the English average (the policy was targeted at areas with high levels of entitlement to free school meals). Of particular importance for this evaluation is the fact that the EiC Phase 3 areas have, on average, lower levels of

measured deprivation – and higher levels of educational achievement – than the EiC Phase 1 & 2 areas. This is described in more detail in section 2 of Morris and Rutt (2006). As a result it would not be appropriate to simply compare the raw outcomes of the pupils in the two areas. The (multivariate) methodology that we employ takes into account both the observable background characteristics of pupils (in particular their results at both Key Stage 2 and at Key Stage 3) and also any time constant impact of differences between pupils (or other factors to do with their backgrounds) that are not observed in the data.

The data set out below is available from Spring 2002, 2003 and 2004. The previous analysis compared the change in outcomes (after taking account of observable characteristics) between Spring 2002 and Spring 2003 between the EiC Phase 1 and 2 areas and the EiC Phase 3 areas. Under the assumption that the impact of any unobserved characteristics on the outcomes of interest has not changed over time, then the differences observed between the two types of areas can be ascribed to the policy. This paper sets out additional analysis that incorporates a third year of data. Unfortunately the policy could have affected pupils' outcomes in all of the areas – no pure comparison group exists. However under the relatively strong assumption that the impact of the Aimhigher: Excellence Challenge policy in the EiC Phase 1 & 2 areas has not changed between Spring 2003 and Spring 2004 it is possible to re-examine the estimated impact of the policy by looking at its impact in the EiC Phase 3 areas.

Our estimates allows for observable differences in the composition of the sample across pilot and comparison areas and over time to be controlled for: indeed the methodology is the same difference-in-differences approach as used for the analysis of the Spring 2002 and Spring 2003, but with the modification that it is now

any improvement in the outcomes observed in the EiC Phase 3 areas relative to that observed in the EiC Phase 1 & 2 areas (after taking into account the impact of observable characteristics) that is ascribed to the policy. The subsequent analysis also provides an estimate for the average impact of the policy across both the EiC Phase 1 & 2 areas and the EiC Phase 3 areas.

The analysis in this paper looks at pupils who have just finished year 11, and therefore will just have taken their GCSE exams. We present aggregate measures such as their total GCSE score[3], their total score for their eight best GCSEs, their average GCSE score, total number of GCSEs at grades A* to C and their results in English and Maths GCSE. In addition we also look at the pupils' self reported intended education leaving age.

Descriptive statistics on the outcomes of interest investigated in this study, by type of area and over time, are shown in Table 2.1. The top panel shows the responses to the question asking when individuals expect to leave education while the bottom panel shows measures of the individuals' subsequent achievement in their GCSEs. The key years of interest for examining the impact of the policy are the changes in outcomes between 2002 and 2003 in the EiC Phase 1 & 2 areas, and the changes in outcomes between 2003 and 2004 in the EiC Phase 3 areas since these are the time periods that correspond to the policy first having been in place for a full year, as noted in the table. Looking at the EiC Phase 1 & 2 areas the proportion responding that they would leave education after age 20 increased from 0.34 in 2002 to 0.38 in 2003, with the average reported age increasing from 18.9 to 19.1 over the same period. There was also an improvement in the total GCSE score and the number of GCSEs achieved

[3] This allocated a mark of 8 for each A*, 7 for each A, 6 for each B, 5 for each C, 4 for D, 3 for E, 2 for F and 1 for G.

at grades A* to C, although there was no increase in the average score in either GCSE mathematics or GCSE English.

A larger increase in both the age at which individuals expect to leave education, and their actual GCSE marks, is seen in the EiC Phase 3 areas between 2003 and 2004. For example the proportion reporting that they intend to leave education at age 20 or over increased from 0.34 in 2003 to 0.43 in 2004. However it should also be noted that between 2002 and 2003 the proportion of individuals in EiC Phase 3 areas reporting that they intended to leave school at age 20 or over declined from 0.45 to 0.34.

Table 2.1. Descriptive statistics of outcomes of interest, by time and area.

	EiC Phase 1 & 2			EiC Phase 3		
	2002	2003	2004	2002	2003	2004
EiC: Aimhigher in place?	No	Yes	Yes	No	No	Yes
Likely to leave education at age :						
16	0.15	0.12	0.14	0.10	0.10	0.09
17	0.04	0.04	0.05	0.04	0.05	0.04
18	0.25	0.22	0.23	0.23	0.22	0.20
20 or over	0.34	0.38	0.35	0.45	0.34	0.43
Don't know	0.16	0.17	0.17	0.15	0.19	0.18
Missing	0.06	0.06	0.06	0.04	0.10	0.05
Average age	18.88	19.12	18.94	19.36	19.09	19.41
GCSE mark :						
GCSE English	4.85	4.88	4.51	4.96	4.50	4.65
GCSE Maths	4.17	4.15	4.16	4.36	3.92	4.14
Total GCSEs	40.99	42.13	43.40	45.26	39.92	41.53
8 best GCSEs	35.49	35.85	35.91	38.04	33.98	36.17
Average GCSE mark	4.29	4.23	4.19	4.53	4.00	4.31
Number of GCSEs A*–C	4.81	5.13	4.40	5.34	4.69	4.85

Since, on average, the EiC Phase 1 and 2 areas have relatively higher levels of indicators of deprivation – such as the proportion eligible for free school meals – the analysis will need to take into account the background characteristics of respondents.

The data include a very rich set of background controls including whether or not the individual lives with their mother or their father or both, the education and economic activity of their parents, an assessment of the number of books in the household (which has been shown by other studies to be associated with subsequent educational outcomes), as well as detailed information on previous attainment as measured by test results at both Key Stage 2 and Key Stage 3.

The average values of some of the key background characteristics, again by both area and over time, are shown in Table 2.2 with the equivalent figures for the full set of controls included in the analysis shown in Table A.1. The background characteristics of those in the EiC Phase 1 and 2 areas are relatively stable over time – for example the proportion with some special education needs is 0.14 in 2002, 0.13 in 2003 and 0.16 in 2004. While the proportion of individuals in EiC Phase 1 or 2 areas achieving levels 7 or 8 in Maths or Science is much lower in 2003 than in either 2002 or 2004, a similar pattern is also observed in the EiC Phase 3 areas. In contrast the background characteristics of those in the EiC Phase 3 areas appears less stable, with a general decline in the proportion reporting characteristics that are typically associated with better educational outcomes between 2002 and 2003. For example the proportion reporting that they live with a father or step-father who is in full-time employment falls from 0.63 in 2002 to 0.49 in 2003. At least in part, this is likely to explain some of the decline in the proportion of individuals reporting that they intend to leave education at age 20 or above that was shown in Table 2.1.

Table 2.2. Summary background characteristics, by time and area.

	EiC Phase 1 & 2			EiC Phase 3		
	2002	2003	2004	2002	2003	2004
Lives with mother and father	0.72	0.70	0.67	0.76	0.67	0.73
Mother university educated	0.12	0.14	0.13	0.15	0.08	0.13
Father university educated	0.13	0.16	0.14	0.17	0.10	0.15
Mother/step mother works full time	0.44	0.40	0.39	0.40	0.32	0.36
Father/step father works full time	0.58	0.54	0.52	0.63	0.49	0.52
White	0.78	0.65	0.67	0.58	0.44	0.44
Always speak English at home	0.88	0.85	0.83	0.87	0.77	0.79
At least 3 Bookcases at home	0.16	0.19	0.15	0.19	0.11	0.15
Eligible for free school meals	0.19	0.22	0.23	0.16	0.26	0.25
Some special educational needs	0.14	0.13	0.16	0.21	0.13	0.11
Key Stage 2 English levels 5 or 6	0.14	0.16	0.17	0.21	0.11	0.14
Key Stage 2 Maths levels 5 or 6	0.16	0.16	0.19	0.19	0.12	0.18
Key Stage 2 Science levels 5 or 6	0.18	0.15	0.21	0.18	0.09	0.17
Key Stage 3 English levels 7 or 8	0.07	0.08	0.09	0.11	0.07	0.10
Key Stage 3 Maths levels 7 or 8	0.15	0.02	0.16	0.24	0.01	0.17
Key Stage 3 Science levels 7 or 8	0.05	0.07	0.08	0.12	0.03	0.07

Note: The full set of background characteristics included in the analysis is described in Table A.1.

3. Results

The change in outcomes between Spring 2003 and Spring 2004 among those pupils in the EiC Phase 3 areas relative to those pupils in the EiC Phase 1 & 2 areas, after taking into account all of their observable characteristics, is shown in the second column of Table 3.1. Under the assumption that in the absence of the introduction of Aimhigher: Excellence Challenge the change in outcomes between Spring 2003 and Spring 2004 observed in the EiC Phase 1 & 2 areas over time would have been the same in the EiC Phase 3 areas (after taking account of observable characteristics), we can attribute any additional change in the EiC Phase 3 areas to the impact of the policy in those areas in Spring 2004. In particular, this assumption requires that the impact of the Aimhigher: Excellence Challenge policy in the EiC Phase 1 & 2 areas is the same in Spring 2004 as it was in Spring 2003.[4]

For comparison, the change in outcomes between Spring 2002 and Spring 2003 among those pupils in the EiC Phase 1 & 2 areas relative to those pupils in the EiC Phase 3 areas, again after taking account all of their observable characteristics, is shown in the first column of Table 3.1. Under the assumption that in the absence of the introduction of Aimhigher: Excellence Challenge the change in outcomes between Spring 2002 and Spring 2003 in the EiC Phase 1 & 2 areas would have been the same as the ones observed in the EiC Phase 3 areas then any additional change in the EiC Phase 1 & 2 areas can be attributed to the impact of the policy in those in Spring 2003.[5]

[4] Unless any change in impact of the policy was offset by other changes.

[5] These estimated impacts are slightly different to the previously published estimates in Emmerson, *et al* (2005) due to changes to definitions of some of the observable characteristics controlled for (which is necessary in order to have comparable data with those collected in 2004). However none of the results have changed in a significant way. In particular the +3.74 percentage point estimated impact of the policy for those in EiC Phase 1 and 2 areas between 2002 and 2003 is not statistically different from the +3.9 percentage point difference found in that previous study.

The top part of the table shows the estimated (percentage point) impact on pupils' expectations of when they will leave education. The bottom panel shows the estimated impact on various measures of their GCSE performance.

In terms of pupils' expectations there is a positive, and statistically significant, estimated impact on the percentage of pupils reporting that they intend to leave education at age 20 or over (+5.15 percentage points), and there are fewer pupils responding that they intend to leave education at younger ages (or that they don't know when they will leave). While this point estimate is larger in magnitude than the estimated impact of the policy on those pupils in the EiC Phase 1 & 2 areas in Spring 2003 (+3.74 percentage points) the two estimates are not statistically different from each other at conventional levels of significance. Therefore it is not possible to reject the hypothesis that the impact of the Aimhigher: Excellence Challenge policy on the percentage of pupils stating that they would like to leave school at ages 20 or over was the same in the EiC Phase 3 areas in Spring 2004 as it was in the EiC Phase 1 & 2 areas in Spring 2003. However it should be noted that the standard errors on these estimates are relatively large and therefore a large difference in the estimated impacts in each of the areas would need to be found for this hypothesis to be rejected (either in favour of the policy having a larger impact in the EiC Phase 3 areas in Spring 2004 or in favour of the policy having a larger impact in the EiC Phase 1 & 2 areas in Spring 2003).

Turning to GCSE results a slightly mixed picture is found. For GCSE English, average GCSE marks and number of A*–C grades a similar positive and statistically significant impact is found for the impact of Aimhigher: Excellence Challenge in the EiC Phase 3 areas in Spring 2004 as was found for the EiC Phase 1 & 2 areas in Spring 2003. However we do not find evidence of a positive and statistically

significant impact on the 8 best GCSEs or the total GCSE results – indeed the latter co-efficients is negative and statistically different from zero at conventional levels.

Table 3.1. Estimated impact of Aimhigher: Excellence Challenge on Year 11 pupil outcomes.

	EiC Phase 1 & 2 areas, estimated impact in Spring 2003 (1)	EiC Phase 3 areas, estimated impact in Spring 2004 (2)	Average estimated impact across (1) and (2) (3)
Likely to leave education at age :			
16	–1.12	–0.83	–0.98
	(1.47)	*(1.36)*	*(1.16)*
17	–0.15	–1.22	–0.63
	(0.92)	*(0.90)*	*(0.74)*
18	+1.05	–2.21	–0.76
	(1.90)	*(1.79)*	*(1.51)*
20 or over	+3.74*	+5.15*	+4.57*
	(1.89)	*(1.81)*	*(1.89)*
Don't know	–2.34	–0.92	–1.60
	(1.72)	*(1.65)*	*(1.36)*
Missing	–1.19	+0.04	–0.60
	(0.80)	*(0.78)*	*(0.64)*
Average age	+0.103	+0.199*	+0.155*
	(0.084)	*(0.081)*	*(0.677)*
GCSE mark :			
GCSE English	+0.24*	+0.32*	+0.28*
	(0.04)	*(0.04)*	*(0.03)*
GCSE Maths	+0.02	–0.06	–0.02
	(0.04)	*(0.04)*	*(0.04)*
Total GCSEs	+2.44*	–2.56*	–0.21
	(0.47)	*(0.48)*	*(0.38)*
8 best GCSEs	+1.50*	–0.01	+0.71*
	(0.33)	*(0.32)*	*(0.26)*
Average GCSE mark	+0.11*	+0.11*	+0.12*
	(0.04)	*(0.04)*	*(0.03)*
Number of GCSEs A*–C	+0.25*	+0.31*	+0.28*
	(0.10)	*(0.10)*	*(0.08)*

Note: Sample sizes given in appendix Table A.2. * indicates that the estimated co-efficient is different from zero at conventional levels of statistical significance. Controls included for gender, household composition, education of parent(s), economic activity of parent(s), ethnicity, indicators of parents first language, estimate of number of books at home, whether in receipt of free school meals, whether has statemented special education needs, results in Key Stage 2 English and Maths and in Key Stage 3 English, Maths and Science. For more details see Tables 2.7 and 2.8 of Emmerson, *et al*, 2005.

The relative similarity of the estimated impact of the policy in the EiC Phase 3 areas in Spring 2004 and the EiC Phase 1 & 2 areas in Spring 2003 suggests that it is not possible to reject the hypothesis that the estimated impact of the policy is constant over these two areas. Column 3 of Table 3.1 shows the estimated impact of the policy on each of the outcomes of interest averaged across both the EiC Phase 1 & 2 areas and the EiC Phase 3 areas. On average the policy is found to increase the percentage of year 11 pupils reporting that they will leave education at age 20 or above by an estimated 4.6 percentage points. This is associated with fewer pupils reporting that they intend to leave education at younger ages, and fewer pupils responding that they don't know when they will leave education. Evidence of positive effects, and statistically significant at conventional levels, are also found for GCSE English results, the best 8 GCSEs, the average mark and the number of A*–C grades attained.

4. Conclusions and policy implications

This short paper looks at the impact that the Aimhigher: Excellence Challenge programme has had on pupils in both EiC Phase 1 & 2 areas in Spring 2003 and Spring 2004 and in EiC Phase 3 areas in Spring 2004. Previous work has estimated the impact on outcomes and pupils expectations in the EiC Phase 1 & 2 areas in Spring 2003 using a difference-in-differences methodology. The lack of a comparison group in Spring 2004 means that further analysis with causal inference is only possible with the relatively strong assumption that the programme had the same impact in the EiC Phase 1 & 2 areas in Spring 2004 as it did in Spring 2003.

Under this assumption we find evidence that the policy had a positive impact on both GCSE English results and the percentage of pupils reporting that they intend to leave education at age 20 or over in the EiC Phase 3 areas in Spring 2004. These estimated impacts are not statistically different to those estimated for pupils in the original Phase 1 & 2 areas in Spring 2003. Therefore it is not possible to reject the hypothesis that the impact of the Aimhigher: Excellence Challenge policy on the percentage of pupils stating that they would like to leave school at ages 20 or over was the same in the EiC Phase 3 areas in Spring 2004 as it was in the EiC Phase 1 & 2 areas in Spring 2003. While the assumptions made in producing these new estimates are relatively strong it is clear that the analysis of the new data does not contradict the previous estimates (which were reliant on less strong assumptions).

The findings reported in this paper, and the necessary assumptions underpinning them, raise a number of issues that should be borne in mind:

- The analysis has only been able to look at intended rather than actual ages of completing education. It is too early to measure the impact of the policy on the number of individuals who complete Higher Education, let alone their subsequent

earnings and employment prospects. While it could be that increasing the age at which pupils intend to leave education is a *necessary* condition for a policy such as Aimhigher: Excellence Challenge to lead to increased participation in Higher Education, it is not *sufficient* for that to be the case.

- The area based nature of the pilots has meant that the evaluation has had to compare the outcomes of pupils in Local Education Authorities (LEAs) where the policy was being introduced to other comparison LEAs. A concern that applies to all area based evaluations is that if other schemes were being implemented differentially in these areas then the estimated impact of the policy could be incorrectly measured (potentially biased upwards or downwards). For example, if the media campaign accompanying Excellence Challenge: Aimhigher affects young people outside the pilot areas including in the comparison areas, the impact of the policy as measured in this paper would understate the true impact.
- Both the pilot areas and the comparison areas are subject to the Excellence in Cities programme. While this helps to ensure that we do not incorrectly ascribe the impact of the Excellence in Cities programme to the Excellence Challenge: Aimhigher programme it also means that the impact of the policy could be different in areas where the Excellence in Cities programme did not operate. This would be the case if there were positive synergies between the two programmes.
- Finally this analysis has only considered the impact of the policy in the first full year of its operation. The lack of similar comparison areas would make analysis of the impact of the policy after more than one year extremely difficult.

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Table A.1 Summary background statistics, by whether individuals are in an Aimhigher: Excellence Challenge school or not

	EiC Phase 1 & 2			EiC Phase 3		
	2002	2003	2004	2002	2003	2004
Male	0.50	0.47	0.49	0.44	0.46	0.49
Lives with mother/step mother	0.90	0.89	0.88	0.93	0.86	0.92
Lives with father/stepfather	0.75	0.73	0.70	0.79	0.70	0.75
Lives with mother & father	0.72	0.70	0.67	0.76	0.67	0.73
Lives with other adult	0.02	0.02	0.02	0.01	0.01	0.02
Lives only with children	0.00	0.00	0.00	0.00	0.01	0.00
Number of children in household	1.18	1.51	1.52	1.29	1.47	1.67
Mother educated to secondary school level	0.73	0.70	0.71	0.71	0.62	0.68
Mother attended college	0.31	0.33	0.33	0.35	0.26	0.33
Mother university educated	0.12	0.14	0.13	0.15	0.08	0.13
Don't know mother's education	0.23	0.24	0.23	0.26	0.28	0.27
Father educated to secondary school level	0.67	0.65	0.65	0.69	0.58	0.64
Father attended college	0.27	0.31	0.29	0.34	0.26	0.32
Father university educated	0.13	0.16	0.14	0.17	0.10	0.15
Don't know father's education	0.26	0.27	0.27	0.27	0.29	0.28
Mother/step mother works full time	0.44	0.40	0.39	0.40	0.32	0.36
Mother/step mother works part time	0.22	0.21	0.21	0.22	0.17	0.17
Mother/step mother doesn't work	0.21	0.24	0.23	0.27	0.31	0.36
Father/step father works full time	0.58	0.54	0.52	0.63	0.49	0.52
Father/step father works part time	0.04	0.05	0.04	0.03	0.04	0.06
Father/step father doesn't work	0.10	0.10	0.09	0.10	0.12	0.15
Other adult works	0.01	0.01	0.01	0.00	0.01	0.00
Other adult work missing	0.00	0.00	0.00	0.00	0.00	0.01
White	0.78	0.65	0.67	0.58	0.44	0.44
Asian background	0.06	0.13	0.09	0.26	0.27	0.32
Black	0.03	0.06	0.06	0.05	0.07	0.06
Other ethnic group	0.06	0.08	0.09	0.07	0.11	0.11
Never speak English at home	0.02	0.02	0.02	0.01	0.02	0.02
Sometimes speak English at home	0.05	0.07	0.08	0.10	0.11	0.14
Always speak English at home	0.88	0.85	0.83	0.87	0.77	0.79
Few books at home	0.16	0.15	0.17	0.14	0.16	0.17
1 Bookshelf	0.25	0.24	0.25	0.26	0.28	0.28
1 Bookcase	0.21	0.19	0.19	0.20	0.20	0.20
2 Bookcases	0.13	0.14	0.12	0.14	0.11	0.13
3 Bookcases	0.16	0.19	0.15	0.19	0.11	0.15
Eligible for free school meals	0.19	0.22	0.23	0.16	0.26	0.25
Some special educational needs	0.14	0.13	0.16	0.21	0.13	0.11
Key Stage 2 English below level	0.04	0.04	0.00	0.05	0.04	0.00
Key Stage 2 English level 3	0.26	0.25	0.24	0.29	0.29	0.26
Key Stage 2 English level 4	0.48	0.48	0.46	0.39	0.48	0.47
Key Stage 2 English levels 5 or 6	0.14	0.16	0.17	0.21	0.11	0.14
Key Stage 2 Maths below level	0.04	0.04	0.00	0.05	0.05	0.00
Key Stage 2 Maths level 2	0.01	0.01	0.04	0.02	0.02	0.06
Key Stage 2 Maths level 3	0.28	0.31	0.23	0.31	0.36	0.27
Key Stage 2 Maths level 4	0.45	0.41	0.46	0.38	0.36	0.42
Key Stage 2 Maths levels 5 or 6	0.16	0.16	0.19	0.19	0.12	0.18
Key Stage 2 Science below level	0.03	0.02	0.00	0.04	0.03	0.01
Key Stage 2 Science level 2	0.01	0.01	0.03	0.01	0.01	0.03
Key Stage 2 Science level 3	0.22	0.23	0.19	0.26	0.28	0.24
Key Stage 2 Science level 4	0.49	0.51	0.50	0.46	0.49	0.48
Key Stage 2 Science levels 5 or 6	0.18	0.15	0.21	0.18	0.09	0.17
Key Stage 2 data missing	0.08	0.08	0.08	0.06	0.10	0.07
Key Stage 3 English level 3	0.04	0.03	0.03	0.04	0.03	0.03
Key Stage 3 English level 4	0.21	0.20	0.20	0.26	0.20	0.20
Key Stage 3 English level 5	0.39	0.35	0.36	0.34	0.36	0.36

Key Stage 3 English level 6	0.22	0.24	0.21	0.16	0.22	0.20
Key Stage 3 English levels 7 or 8	0.07	0.08	0.09	0.11	0.07	0.10
Key Stage 3 Maths level 2	0.01	0.01	0.01	0.01	0.01	0.01
Key Stage 3 Maths level 3	0.08	0.09	0.09	0.09	0.10	0.11
Key Stage 3 Maths level 4	0.22	0.21	0.20	0.21	0.22	0.19
Key Stage 3 Maths level 5	0.26	0.25	0.23	0.22	0.26	0.25
Key Stage 3 Maths level 6	0.23	0.23	0.25	0.18	0.21	0.23
Key Stage 3 Maths levels 7 or 8	0.15	0.02	0.16	0.24	0.01	0.17
Key Stage 3 Science level 2	0.01	0.01	0.01	0.01	0.01	0.00
Key Stage 3 Science level 3	0.11	0.08	0.07	0.11	0.10	0.10
Key Stage 3 Science level 4	0.24	0.22	0.21	0.29	0.26	0.21
Key Stage 3 Science level 5	0.32	0.33	0.35	0.26	0.35	0.33
Key Stage 3 Science level 6	0.22	0.24	0.21	0.17	0.18	0.21
Key Stage 3 Science levels 7 or 8	0.05	0.07	0.08	0.12	0.03	0.07
Key Stage 3 data missing	0.05	0.21	0.14	0.05	0.20	0.14

Table A.2 Sample sizes for Table 3.1.

	EiC Phase 1 & 2 areas, estimated impact in Spring 2003 (1)	EiC Phase 3 areas, estimated impact in Spring 2004 (2)	Average estimated impact across (1) and (2) (3)
Likely to leave education at age :			
16	18,504	19,283	26,338
17	18,504	19,283	26,338
18	18,504	19,283	26,338
20 or over	18,504	19,283	26,338
Don't know	18,504	19,283	26,338
Missing	18,504	19,283	26,338
Average age	14,092	14,816	20,245
GCSE mark :			
GCSE English	18,504	19,283	25,955
GCSE Maths	18,298	19,042	26,338
Total GCSEs	18,504	19,283	26,047
8 best GCSEs	18,406	19,217	26,338
Average GCSE mark	18,406	19,217	26,222
Number of GCSEs A*–C	18,402	19,209	26,222

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Online: www.dfespublications.gov.uk

Produced by the Department for Education and Skills

ISBN 978 1 84478 844 6
Ref No: RR812
www.dfes.go.uk/research